WHAT IS CLAIMED IS:

1. A pneumatic radial tire having a carcass including radially inner and outer carcass plies each having a ply body extending from a tread portion to a bead core of a bead portion through a sidewall portion, wherein

each of the inner and outer carcass plies includes a cord-arrangement body in which carcass cords are aligned to each other, front and back surfaces of the cord-arrangement body are coated with topping rubber, a complex elastic modulus E*1 of the topping rubber of the inner carcass ply is different from a complex elastic modulus E*2 of the topping rubber of the outer carcass ply, and a ratio E*1/E*2 is 0.95 or lower or 1.05 or higher.

- 2. The pneumatic radial tire according to claim 1, wherein the ratio E*1/E*2 is 0.8 to 0.95 or 1.05 to 1.3.
- 3. The pneumatic radial tire according to claim 1 or 2, wherein lower one of the complex elastic moduli E*1 and E*2 is in a range of 4.0 to 5.0 Mpa.